

13. The motor of claim 12 wherein said motor is a variable reluctance motor.

## Abstract of Disclosure

The invention provides a method and apparatus for maintaining the force, or torque, delivered by a variable reluctance motor as the speed of the motor increases. The

- 5 method comprises the steps of sensing the speed of the motor and varying the number of turns of the motor's phase coil based on the sensed speed. The apparatus includes a motor speed sensor for sensing the speed of the motor and an inductance switch for switching the number of turns of the phase coil from a first value to a second value based on the sensed speed. One embodiment of the invention
- 10 includes an inductance compensation circuit to compensate for the change in load inductance when the number of turns of the phase coil is switched.